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10/790,081	03/02/2004	Seong-Bong Kim	8054L-204T	2543

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EXAMINER	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/790,081
Filing Date: March 02, 2004
Appellant(s): KIM ET AL.

MICHAEL F. MORENO
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 8/28/2006 appealing from the Office action mailed 3/28/2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct except for the withdrawn rejection listed below.

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

The rejection of claims 34-39 under 35 USC 112, second paragraph is withdrawn.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6398870	KAYA ET AL	6-2002
3753085	MORTON ET AL	8-1973
3924565	BENNER ET AL	12-1975
5575852	CHASE	11-1996

(9) Grounds of Rejection

Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAYA ET AL in view MORTON ET AL.

KAYA ET AL teaches the design of an apparatus for coating a substrate comprising: a support 7 supporting a substrate; a coater 3 including a discharging unit for discharging the coating onto substrate and coating the substrate; a detector 1 for detecting coating defects which can include foreign matters on the surface of the substrate, and a controller controlling the coater and the detector. KAYA ET AL teaches the nozzles are movable in accordance with which reads on the term "along" the shape of the substrate (see column 2 line 52 to column 3 line 35). KAYA ET AL fails to teach the detector 1 is disposed in front of the coater. However, MORTON ET AL teaches the design of an apparatus as shown in Figure 1 for coating a substrate comprising: a support

supporting a substrate; a coater S including a discharging unit for discharging the coating onto substrate and coating the substrate; a detector D for detecting defects on the surface of the substrate, the detector is arranged in front of the coater and a controller controlling the coater and the detector. MORTON ET AL teaches the detector is arranged in front of and spaced apart from the coater so the coating does not contact or interfere with the operation of the detector means D or the rest of the apparatus (see column 6 lines 63-68). Therefore, it would have been obvious to modify the KAYA ET AL by arranging the detector in front of the coaters since MORTON ET AL teaches arranging the detectors in front of the coaters for the taught advantage of preventing contact or interference of coating with the operation of the detector means D or the rest of the apparatus. With respect to claims 35-36, KAYA ET AL teaches the detector includes an image sensor which is a CCD camera.

Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAYA ET AL in view MORTON ET AL and, if necessary, CHASE and BENNER ET AL.

KAYA ET AL teaches the design of an apparatus for coating a substrate comprising: a support 7 supporting a substrate; a coater 3 including a discharging unit for discharging the coating onto substrate and coating the substrate; a detector 1 for detecting coating defects which can include foreign matters on the surface of the substrate, and a controller controlling the coater and the detector. KAYA ET AL teaches the nozzles are movable (see column 2 line 52 to column 3 line 35). KAYA ET AL fails to teach the detector 1 is disposed

in front of the coater. However, MORTON ET AL teaches the design of an apparatus as shown in Figure 1 for coating a substrate comprising: a support supporting a substrate; a coater S including a discharging unit for discharging the coating onto substrate and coating the substrate; a detector D for detecting defects on the surface of the substrate, the detector is arranged in front of the coater and a controller controlling the coater and the detector. MORTON ET AL teaches the detector is arranged in front of and spaced apart from the coater so the coating does not contact or interfere with the operation of the detector means D or the rest of the apparatus (see column 6 lines 63-68). However, it would have been obvious to modify the KAYA ET AL by arranging the detector in front of the coaters since MORTON ET AL teaches arranging the detectors in front of the coaters for the taught advantage of preventing contact or interference of coating with the operation of the detector means D or the rest of the apparatus. Further, although as discussed above, the instant claims reads on a transfer unit movable in accordance with which reads on the term "along" the shape of the substrate which KAYA ET AL teaches (see column 2 line 52 to column 3 line 35). If applicant intended to claim that the transfer unit moves the discharging unit along the length of the substrate and amends the claim in such a manner to claim such movement, the examiner maintains that it would have been obvious given the modifications of the KAYA ET AL apparatus as discussed above to arrange its detectors and coaters on an arched support which is capable of traveling along the length of the surface of the substrate since it is known to arrange nozzles supported on arched support that extends over the substrate with means for

moving the nozzles or coaters such that the nozzles or coaters can be moved along the direction of travel of the substrate if desired and, if necessary, is shown CHASE (motive means along rails 12 as shown in Figure1), BENNER ET AL (wheels 18 as shown in Figure 1) for the obvious advantage of greater control of the process.

(10) Response to Argument

Appellant's argument that the prior art does not teach coating device rather teaches marking devices and the originally filed disclosure describes uniformly coating portions of the substrate is found to be non-persuasive. First of all, the claims are silent as to applying coating to the substrate in a manner such that a uniform layer of coating is formed on portions of the substrate. Therefore, the examiner maintains that both KAYA ET AL and MORTON ET AL teach applying a layer of coating material on the substrate thereby reading on a coating of a substrate.

Appellant's argument that the prior art references do not disclose coating on the substrate by the unit substrate is found to be non-persuasive. The KAYA ET AL spraying device is capable of coating a certain area of a substrate or a unit substrate of the substrate via a pivoting portion of the coating spray device which enables one to mark/coat an area of the substrate (see column 3 lines 6-9).

Appellant's argument that the KAYA ET AL fails to teach a detector disposed in front of the coater and modifying the system taught by KAYA ET AL to include a detector arranged in front of the coater would render the device

unsatisfactory for its intended purpose and would change the principle of operation of the KAYA ET AL is found to be non-persuasive. KAYA ET AL teaches at column 2 lines 52-60 that the piezo pumps of the coater are arranged a predetermined distance downstream of the detector (a CCD camera) thereby appearing to read on the claimed limitation of the detector being positioned in front of the coater especially since given the term "in front of", which refers to the positioning of the detector to the coater, is a relative term dependent on the view of the user. In any event, MORTON ET AL teaches the design of an apparatus as shown in Figure 1 for coating a substrate comprising: a support supporting a substrate; a coater S including a discharging unit for discharging the coating onto substrate and coating the substrate; a detector D for detecting defects on the surface of the substrate, the detector is arranged in front of the coater and a controller controlling the coater and the detector. MORTON ET AL teaches the detector is arranged in front of and spaced apart from the coater so the coating does not contact or interfere with the operation of the detector means D or the rest of the apparatus (see column 6 lines 63-68). Therefore, it would have been obvious to modify the KAYA ET AL by arranging the detector in front of the coaters since MORTON ET AL teaches arranging the detectors in front of the coaters for the taught advantage of preventing contact or interference of coating with the operation of the detector means D or the rest of the apparatus.

Appellant's argument that KAYA ET AL and MORTON ET AL are non-analogous art is found to be non-persuasive. In response to applicant's argument that KAYA ET AL and MORTON ET AL are each nonanalogous art to the

problems associated with discharging photosensitive material onto a substrate, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, appellant's claims are directed to an apparatus and the KAYA ET AL apparatus taken alone or in combination with MORTON ET AL is capable of applying a variety of materials onto an area of a substrate or onto the substrate by the unit substrate since KAYA ET AL apparatus taken alone or in combination with MORTON ET AL teaches every element of the claimed apparatus. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

Appellant's argument that it would have not have been obvious to modify the KAYA ET AL by arranging the KAYA ET AL coaters and detectors on an movable arched support such as shown by BENNER ET AL and CHASE is found to be non-persuasive. The KAYA ET AL apparatus has its detectors and coaters arranged on an arched support 11 as shown in Figure 2 and the coaters are movable relative to the traveling substrate. Therefore, as discussed above, the

examiner maintains that it would have been obvious to modify the KAYA ET AL apparatus to provide an additional movement means to enable the arched support along with its detectors and movable coaters arranged thereon such that the coaters are capable of movement along the length of the surface of the substrate since it is known to arrange nozzles supported on arched support that extends over the substrate with means for moving the nozzles along with arched support such that the nozzles can be moved along the direction of travel of the substrate if desired and, if necessary, is shown CHASE (motive means along rails 12 as shown in Figure1), BENNER ET AL (wheels 18 as shown in Figure 1) for the obvious advantage of greater control of the process.

Appellant's argument that BENNER ET AL and CHASE are non-analogous art is found to be non-persuasive. In response to applicant's argument that BENNER ET AL and CHASE are each non-analogous art to the problems associated with discharging photosensitive material onto a substrate, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, appellant's claims are directed to an apparatus and the KAYA ET AL apparatus taken alone or in combination with MORTON ET AL or in combination with MORTON ET AL and in further view if necessary, BENNER ET AL and CHASE is capable of applying a variety of materials onto an area of a substrate or onto the substrate by the unit substrate since KAYA ET AL

apparatus taken alone or in combination with MORTON ET AL or in combination with MORTON ET AL and in further view if necessary, BENNER ET AL and CHASE teaches every element of the claimed apparatus. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Brenda Adele Lamb

BRENDA A. LAMB
PRIMARY EXAMINER

BRENDA ADELE LAMB

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